### Kahuku Medical Center Community Health Needs Assessment Summary and Implementation Strategy

#### Prepared by:

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Hawaii State Department of Health State Office of Primary Care & Rural Health

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#### Introduction

New requirements for nonprofit, 501(c)(3), hospitals were enacted under the Patient Protection and Affordable Care Act (ACA), passed on March 23, 2010. One of the most significant of the new requirements is the Community Health Needs Assessment (CHNA) that must be conducted during taxable years after March 23, 2012 and is submitted with IRS form 990. A CHNA must be completed every three years.

While the requirements are fairly new, the IRS has made strides in defining hospitals that must complete the CHNA as well as details of what is expected in the CHNA report to be submitted. At this time the only entities that must complete the CHNA are hospital organizations defined as:

- An organization that operates as a state-licensed hospital facility
- Any other organization that the Secretary determines has the provision of hospital care as its principal function or purpose constituting the basis for its exemption under section 501(c)(3).

The general goal behind the requirement is to gather the community input that leads to recommendations on how the local hospital can better meet and serve residents' needs. The community input is typically derived from a community survey and a series of open meetings. Local health data are presented. Community members then identify and prioritize their top health needs.

After receiving the community's input, the hospital defines an implementation strategy for their specific facility. The implementation strategy is a written plan that addresses each of the health needs identified in the community meetings. To meet Department of Treasury and IRS guidelines, an implementation strategy must:

- Describe how the hospital facility plans to meet the identified health needs, or
- Explain why the hospital cannot meet the health need.<sup>1</sup>

After the needs are identified that the hospital can address, the implementation strategy must take into account specific programs, resources, and priorities for the particular facility. This can include existing programs, new programs, or intended collaboration with governmental nonprofit or other health care entities within the community.<sup>2</sup>

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<sup>&</sup>lt;sup>1</sup> Internal Revenue Service. 2011. Notice and Requests for comments Regarding the Community Health Needs Assessment Requirements for Tax-Exempt Hospitals. Internal Revenue bulletin: 2011-30.

<sup>&</sup>lt;sup>2</sup> Ibid.

#### Overview of Process

Kahuku Medical Center undertook a Community Visioning Process in April-May 2015 where five meetings took place over six weeks with more than 80 participants and 91 responses to an online survey. In April-May 2016, Kahuku undertook a CHNA to supplement the information obtained from the visioning process. The CHNA process included creating a CHNA advisory committee consisting of community members representing the different segments of the community. The process was facilitated by personnel from the Hawaii State Department of Health, Office of Primary Care and Rural Health. This advisory committee met twice to receive input relative to their medical service area. At the first meeting the committee received and discussed two reports:

Report #1: The economic Impact of Kahuku Medical Center

Report #2: Demographic and Economic Data

At the second meeting two more studies were presented:

Report #3: Health Indicators/Health Outcomes Data

Report #4: Health Survey Results

At both meetings, and especially at the second, the advisory committee discussed the community's health needs. The advisory committee also conducted a survey and received completed surveys from 209 households. This allowed the advisory committee to identify the most critical community health issues.

The participants, facilitators, and medical service area will be identified in the next section. A review of each of the meetings will be presented. Then the community health needs identified by the advisory committee will be presented with their top priorities. Copies of the report are available at Kahuku Medical Center.

#### Participants, Facilitators, and Medical Service Area

Every effort was made to have the different segments of the medical service area (MSA) represented in the CHNA process. Community members that participated in the process, as well as the segment of the community represented, are listed in Table 1. The facilitators are presented in Table 2.

The Kahuku Medical Center MSA is depicted in Figure 1. The MSA includes the five zip codes of 96712, 96717, 96730, 96731, and 96762. the MSA follows zip code boundaries because of data availability.

Table 1
Kahuku Medical Center Community Health Needs Assessment
Advisory Committee Representation

| or<br>al and Hawaiian community member<br>al<br>n Medical Center Board Chair, Hauula Community Association, and retiree |
|---|
| al and Hawaiian community member<br>al<br>Medical Center Board Chair, Hauula Community Association, and retiree         |
| al<br>I Medical Center Board Chair, Hauula Community Association, and retiree   |
| Medical Center Board Chair, Hauula Community Association, and retiree   |
|   |
|   |
| Resources for Kahuku Medical Center, and Hawaiian community member  |
| worker for Kahuku Medical Center  |
| an  |
| unity physician and Hospitalist for Kahuku Medical Center   |
| Senate Legislative Aide   |
| Health and Community Advocate   |
| or Kahuku Medical Center  |
|   |

### Table 2 Kahuku Medical Center Community Health Needs Assessment Facilitataors

R. Scott Daniels, Performance Improvement Coordinator

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Phone: 808-961-9460

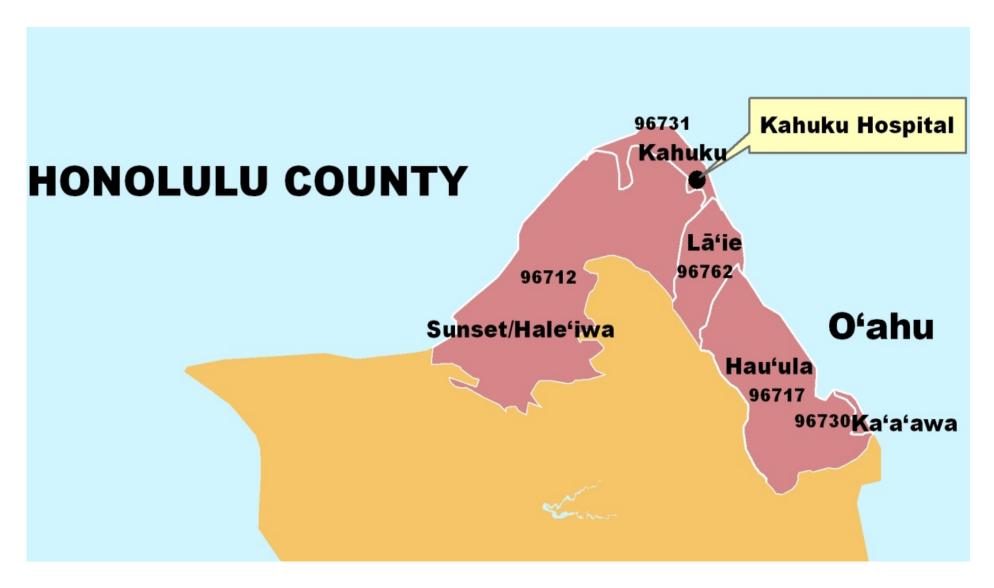
and

Gregg Kishaba, Rural Health Coordinator Email: gregg.kishaba@doh.hawaii.gov

Phone: 808-586-4119

Hawai'i State Department of Health Office of Primary Care & Rural Health

Figure 1 Kahuku Medical Center Medical Service Area



#### About Kahuku Medical Center

Kahuku Medical Center is the only facility operating within the primary service area offering hospital inpatient, outpatient, and ancillary services. Services provided include 21 beds (all private rooms), 24-hour emergency room, in-house laboratory, in-house radiology, in-house pharmacy, dietary, physical therapy, occupational therapy, respiratory therapy, social services,

and speech therapy. Kahuku Medical Center is licensed for 15 acute/swing beds and 6 skilled intermediate (SNF/ICF) long term care beds. The hospital campus also houses a primary care physician clinic with family practice, obstetrics/gynecology and pediatric specialties.

Kahuku Medical Center is designated as a Critical Access Hospital by the State of Hawaii and the Medicare program. The Medical Center is the emergency safety net for



23,200 residents and approximately one million annual visitors to the North Shore and Koʻolauloa areas. The staff of Kahuku Medical Center organization are committed to working together to create a culture that is focused on service, operational excellence, and values the patients, employees, and physicians.

Kahuku Medical Center contracts emergency physicians. These emergency physicians are a diverse group with a wealth of experience, more than 100 years combined in emergency medicine. Having this experience not only makes them better physicians, but gives them the breadth of professional and life skills necessary to deal with the diverse patient population. These physicians are committed to bringing the best in emergency care to Kahuku Medical Center and the members of this community. They live here, work here, and are dedicated to serving this area for many years to come. Kahuku Medical Center Emergency Services is open 24 hours a day and provides medical services for patients with illness and injuries, some of which are life threatening requiring immediate medical care.

Kahuku Medical Center contracts for hospitalist care to address the needs of inpatient admissions from the emergency department. With hospitalist care, the inpatient care is turned over to a hospitalist when the patient has no primary care physician (PCP) or the PCP is not available to provide inpatient services.

Kahuku Medical Center is a fully certified CLIA laboratory with state of the art instruments capable of performing various assays in a quick and accurate manner. Kahuku Medical Center has a licensed pharmacy that provides a full range of pharmacy services for hospital patients. The Pharmacy's mission is to help patients and staff make the best use of medications. The Radiology Department has installed a Shimadzu Radiographic X-Ray machine, with a Konica Minolta C.R. System as well as a brand new CT scanner. The respiratory therapist plans, coordinates and delivers respiratory therapy services and programs throughout Kahuku Medical Center for all age groups of patients, including neonates, pediatrics, adolescents, adults and geriatrics.

KMC provides skilled inpatient and outpatient occupational therapy. Physical therapy at Kahuku Medical Center includes treatments for a variety of injuries resulting from motor vehicle accidents, work-related and sports injuries; and diseases involving neurological, orthopedic, and cardiopulmonary impairments. Speech therapy are available for adult acute, skilled nursing, and outpatient care, including clinical services for the remediation of varied cognitive-communicative disorders. A licensed social worker provides a wide range of social services. The mission for social services is to provide the highest quality of life for all patients through the continuum from admission to discharge. Pediatric outpatient services are available and include evaluation and treatment of speech, language, learning, and social communication deficits.

The latest service that is now being provided is primary care. There will be a total of 3 family physicians and a physician's assistant by the November 2016. The clinic opened January 2015.

Specialties such as behavioral health, ultrasound, podiatry, pulmonology, and gastroenterology are also available on site.

Kahuku Medical Center is a trusted healing resource partner dedicated to assisting in the creation of a thriving healthy community thereby enhancing the quality of life in Koʻolauloa for generations.

#### **Community Input Summary**

In April and May of 2015, KMC held a community vision process that was held in five meetings over six weeks. This process brought together over 80 people to the public meetings and collected 91 responses to an online survey concerning the health and health services of the community. This process ensured that there was broad representation from the community and included a meeting that focused on youth issues by holding one of the meetings with the Kahuku High School Health Academy. The visioning process also interviewed the KMC Campus partners for their input on the future of health in the community and the role of KMC. The outcomes of these meetings are summarized in Table 3.

## Table 3 KMC Community Visioning Process Summary of Community Input

#### Barriers to Health

Lack of specialty services/clinics

Lack of Exercise

Unhealthy Diet or Eating Habits

Hospital services are under-utilized—lack of community & partner trust or understanding of what KMC provides

No clearinghouse of available services / lack of awareness and communication

Lack of early identification of mental and behavioral health issues

Transportation

Lack of engaging Elderly Care Options

#### Ways to Promote Health & Wellness

Develop specialty services—bring in specialty physicians to hold clinics

Develop fitness/wellness opportunities on campus

Host events that bring people to KMC and promote health, e.g., Farmer's Market, Community garden, wellness classes

Improve social media / Focus on community outreach

Partner with trusted providers: Queen's, Castle

KMC-operated transportation service

Partner to provide quality adult day care

In addition to the vision process, KMC formed a CHNA advisory committee to help evaluate additional data from and about the Koʻolauloa community and ensure that the priorities developed from the visioning process remained relevant.

The CHNA advisory committee met twice. At each meeting the committee was given data and discussed the presented data. The reported data and discussion highlights will be presented by meeting.

#### Community Input Meeting #1

The agendum for the first meeting is presented in Table 4. Since it was the first meeting of the advisory committee, a presentation of the complete CHNA process was presented and discussed. The responsibilities of the advisory committee were clearly identified. In addition to this discussion, Report #1, the economic impact of Kahuku Medical Center, and Report #2, demographic and economic data for the medical service area of Kahuku Medical Center, were presented.

The economic impact of Kahuku Medical Center on the MSA economy is measured by employment, payroll, and construction activities. Kahuku Medical Center provided the direct economic activity data presented in Table 5. For 2016, the total full-time, part-time, and contract employment was 123 with wages, salaries, and benefits and contract labor costs of \$6.0 million. (Wages, salary, and benefits, when applicable, will be referred to as "income" throughout the rest of the study.)

Kahuku Medical Center had construction costs of \$56,413 in 2015, \$240,624 in 2016 and estimates to have 1.4 million in 2017. Based on the 2017 estimated construction activity of \$1.4 million, IMPLAN data were utilized to estimate the construction employment and income. Construction employment was estimated to be 11 construction employees with construction income of \$722,600. The average annual salary from construction activities is estimated at \$65,695. These data reflect the direct economic activities of Kahuku Medical Center.

Many rural communities have a large number of elderly, and the ranchers and farmers often retire in the towns. Thus, hospital facilities are an important component of the health sector. In summary, Kahuku Medical Center is vitally important as a community employer and important to the community's economy. The hospital employs a large number of residents. The hospital and the employees in the hospital purchase a large amount of goods and services from businesses in the MSA. These impacts are referred to as secondary impacts or benefits to the economy. Employment and income multipliers for the area have been calculated using the IMPLAN model. The model was developed by the U.S. Forest Service and allows for development of zip code area multipliers. Multipliers generated from the IMPLAN software and data will be utilized to illustrate the secondary impacts.

Kahuku Medical Center creates employment through operations and construction activities. These impacts are shown in Tables 6 and 7. The employment multiplier for the hospital operations component is 1.36 (Table 6). This indicates that for each job created in that sector, a 0.36 job is created throughout the area due to business (indirect) and household (induced) spending. Applying the employment multiplier to the hospital employment of 123 yields an estimate of the hospital's employment impact on the MSA. Kahuku Medical Center has a total employment impact of 167 employees from operations in 2016. The secondary impact of Kahuku Medical Center is 44 employees; these are the jobs created in other industry sectors in the economy of the MSA as a result of the spending of Kahuku Medical Center and the spending of the hospital employees.

# Table 4 Kahuku Medical Center Agendum for Community Meeting #1 Wednesday, May 4, 2016 at 5 pm

- I. Introductions Stephany Nihipali Vaioleti, CEO, Kahuku Medical Center, and Scott Daniels & Gregg Kishaba, Hawai'i State Office of Primary Care and Rural Health
- II. Overview of Community Health Needs Assessment Process Scott Daniels
- III. Kahuku Medical Center Services and Community Benefits—Stephany Vaioleti
- IV. Demographic and Economic Data Study Scott Daniels
- V. Kahuku Medical Center Community Health Survey Questionnaire Gregg Kishaba
- VI. Next Steps

Meeting #2, June 1, 5 pm

## Table 5 Direct Economic Activities of Kahuku Medical Center in Honolulu County, Hawaii

| Operations 2016 Operations Employment 2016 Operations Income              | 123<br>\$6,046,000             |
|---|--------------------------------|
| Construction 2015 2016  | \$56,413<br>\$240,624          |
| Estimated 2017 Construction Employment Estimated 2017 Construction Income | \$1,379,000<br>11<br>\$722,639 |

SOURCE: Local operations employment and income data and construction data provided by Kahuku Medical Center; Construction employment and income for 2016 estimated from IMPLAN, Minnesota IMPLAN Group, Inc.

Table 6
Employment and Income Impact from Operations
of Kahuku Medical Center in Honolulu County, Hawaii

| Health Care<br>Component | Direct<br>Impact | Multiplier | Secondary<br>Impact | Total<br>Impact |
|--------------------------|------------------|------------|---------------------|-----------------|
| Operations Employment    | 123              | 1.36       | 44                  | 167             |
| Operations Income        | \$6,046,000      | 1.19       | \$1,148,740         | \$7,194,740     |

SOURCE: Local employment and income data provided by Kahuku Medical Center; multipliers from IMPLAN, Minnesota IMPLAN Group, Inc.

Table 7
Impact from 2017 Construction Activities
of Kahuku Medical Center in Honolulu County, Hawaii

| Health Care             | Direct    |            | Secondary | Total     |
|-------------------------|-----------|------------|-----------|-----------|
| Component               | Impact    | Multiplier | Impact    | Impact    |
| Construction Employment | 11        | 1.31       | 3         | 14        |
| Construction Income     | \$722,639 | 1.15       | \$108,396 | \$831,035 |

SOURCE: Local construction data for 2017 of \$722,639 provided by Kahuku Medical Center; construction employment and income estimated from IMPLAN and construction employment and income multipliers from IMPLAN, Minnesota IMPLAN Group, Inc.

Data on the income impact from the operations of Kahuku Medical Center are also presented in Table 6. Kahuku Medical Center reported income from operations of \$6.0 million in 2016. Using the hospital income multiplier of 1.19, Kahuku Medical Center generated secondary income in other businesses of \$1.1 million. In 2016, the total income impact of Kahuku Medical Center from operations was \$7.2 million on the economy of the medical service area.

The estimated impact from the 2017 construction activities is illustrated in Table 7. The 20137 construction activities are expected to result in an estimated 11 jobs. These construction jobs work directly on hospital construction activities. These construction companies and construction workers also have secondary impacts that are measured by multipliers. The construction employment multiplier for the MSA is 1.31. Thus, three secondary jobs will be created in other businesses due to construction activities of Kahuku Medical Center. Total employment impact from 2017 hospital construction activities is estimated to be 14 jobs.

Income generated directly by construction workers engaged in hospital construction activities in 2017 is estimated at \$722,639. Applying the construction income multiplier of 1.15, hospital construction activities are estimated to generate \$108,400 in income in other businesses. In 2017, Kahuku Medical Center is estimated to have a total income impact from hospital construction activities of \$831,035 in the medical service area economy.

Table 8

Population by Zip Code Tabulation Areas (ZCTAs) for Age Groups
for the Medical Service Area (MSA) of Kahuku Medical Center

|                       | 0–14   | 15–19 | 20–24  | 25–44  | 45–64  | 65+    | Totals |
|-----------------------|--------|-------|--------|--------|--------|--------|--------|
| 2000 Totals           | 5,325  | 1,953 | 1,925  | 6,235  | 4,604  | 1,862  | 21,904 |
| 2000 % of Total       | 24.30% | 8.90% | 8.80%  | 28.50% | 21.00% | 8.50%  | 100%   |
|                       |        |       |        |        |        |        |        |
| 2010 Totals           | 4,783  | 2,141 | 2,580  | 6,716  | 5,589  | 2,350  | 24,159 |
| 2010 % of Total       | 19.80% | 8.90% | 10.70% | 27.80% | 23.10% | 9.70%  | 100%   |
| 2014 Totals           | 4,893  | 1,978 | 2,398  | 6,490  | 5,006  | 2,456  | 23,221 |
| 2014 % of Total       | 21.10% | 8.50% | 10.30% | 27.90% | 21.60% | 10.60% | 100%   |
| % Change from 2000 to |        |       |        |        |        |        |        |
| 2014                  | -8.10% | 1.30% | 24.60% | 4.10%  | 8.70%  | 31.90% |        |

SOURCE: U.S. Census Bureau, American FactFinder (factfinder.census.gov [April 2016]).

Table 9
Population Projections by Zip Code
for the Medical Service Area of Kahuku Medical Center

### **2014-2019 Change**

|              |                           |          |            |           |            | % Growth       |
|--------------|---------------------------|----------|------------|-----------|------------|----------------|
| Pri ma ry    |                           | 2014     | 2019       | 2014-2019 | 2014-2019  | Share of Total |
| Service Area | Name                      | Estimate | Projection | % Change  | Ab. Change | Service Area   |
| 96731        | KAHUKU                    | 3,370    | 3,507      | 4%        | 137        | 25%            |
| 96762        | LAIE                      | 6,600    | 6,847      | 4%        | 247        | 45%            |
| 96717        | HAUULA                    | 5,362    | 5,388      | 0%        | 26         | 5%             |
| 96730        | KAAAWA                    | 1,788    | 1,804      | 1%        | 16         | 3%             |
| 96712        | HALEIWA                   | 7,620    | 7,741      | 2%        | 121        | 22%            |
|              | <b>Total Service Area</b> | 24,740   | 25,287     | 2%        | 547        | 100%           |
|              | Hawaii                    | 1        | 1          | 5%        |            |                |
|              | United States             | 317      | 328        | 4%        |            |                |

State and US in Millions

Source: Truven Health Analytics

|                    | 2014     | 2019       | Absolute | Percent | Share of |
|--------------------|----------|------------|----------|---------|----------|
| Total Service Area | Estimate | Projection | Change   | Change  | Growth   |
| 00-17              | 6,021    | 6,245      | 224      | 4%      | 32%      |
| 18-44              | 10,528   | 10,570     | 42       | 0%      | 6%       |
| 45-64              | 5,488    | 5,325      | -163     | -3%     | 0%       |
| 65+                | 2,703    | 3,147      | 444      | 16%     | 63%      |
| Total              | 24,740   | 25,287     | 547      | 2%      | 100%     |

Source: Truven Health Analytics

Table 10

Population by Zip Code Tabulation Areas (ZCTAs) for Race and Ethnic Groups for the Medical Service Area (MSA) of Kahuku Medical Center

|                       |        |         |         | Native   |         | Two or<br>More |        | Hispanic |
|-----------------------|--------|---------|---------|----------|---------|----------------|--------|----------|
|                       | White  | Black   | Asian   | Hawaiian | Other   | Races          | Totals | Origin   |
| 2000 Totals           | 6,841  | 104     | 3,122   | 2,502    | 2,993   | 6,342          | 21,904 | 1,586    |
| 2010 % of Total       | 31.20% | 0.50%   | 14.30%  | 11.40%   | 13.70%  | 29.00%         | 100%   | 7.20%    |
| 2010 Totals           | 7,998  | 158     | 3,185   | 2,398    | 3,337   | 7,083          | 24,159 | 1,884    |
| 2010 % of Total       | 33.10% | 0.70%   | 13.20%  | 9.90%    | 13.80%  | 29.30%         | 100%   | 7.80%    |
| 2014 Totals           | 8,489  | 369     | 2,709   | 2,453    | 2,182   | 7,019          | 23,221 | 1,970    |
| 2014 % of Total       | 36.60% | 1.60%   | 11.70%  | 10.60%   | 9.40%   | 30.20%         | 100%   | 8.50%    |
| % Change 2000 to 2014 | 24.10% | 254.80% | -13.20% | -2.00%   | -27.10% | 10.70%         |        | 24.20%   |

SOURCE: U.S. Census Bureau, American FactFinder (factfinder.census.gov [April 2016]).

Also discussed at this meeting was the demographic and economic data report. The data of most interest were demographics by race, ethnic groups, and age. The past and future trends were discussed

The complete data and information report consisted of eight tables of economic and demographic data. The tables most discussed are presented in this report. Data on Table 8 reflect population by age for 2000, 2010, and 2014 (U.S. Census data). The MSA population increased 6.0%. The number of elderly 65+ grew 31.9%.

Data on Table 9 reflect population data from Truven Health Analytics. This table includes population forecasts for 2019. Again, the data indicates overall population projections of 2% from 2014 to 2019. Over the same period, the elderly 65+ increased 16%. This clearly indicates the huge growth in elderly and reflects increased health and medical needs, especially for the elderly.

Data in Table 10 reflect race and ethnic data from 2000, 2010, and 2014 U. S. Census. From 2000 to 2014, the largest change in race was in the black race group with an increase of 254.8%, followed by the white race group with a 24.1% increase and the mixed race group with a 10.7% increase. The Hispanic origin ethnic group reflected a 24.2% increase from 2000 to 2014.

#### Community Input Meeting #2

The agenda for Meeting #2 is presented in Table 11. The health indicators/health outcomes report, Report #3, was presented and discussed. The complete report contains 8 tables of health indicators/health outcomes data. The tables that received the most attention were Tables 12 and 13. The North Shore region is basically the Kahuku MSA. The items that received the most attention were tobacco use, poor mental health days, obesity, and adults not getting a flu shot.

Also discussed at Meeting #2 was Report #4, Results from the Community Health Needs Survey. Each advisory committee member took surveys to the segments of the MSA population represented. In addition, the survey was made available online via "SurveyMonkey." A total of 209 completed surveys were returned. This survey asked the age of the respondent and results of the age analysis indicated that the survey was representative of the MSA population.

Twenty-seven questions were asked in the survey. Questions 25 and 26 lead to the most discussions at the meeting. Question 25 is presented in Table 14.

In Table 14, the concerns that received the most responses were obesity (14.8%) followed by access to healthy foods/diet (10.9%) and cost of care (9.3%). In Table 15, the need for specialty care was the top response with 51.4 % of the total responses listed as services the respondents would like to see offered at Kahuku Medical Center

The advisory committee discussed all survey responses and the outcomes from the visioning process and listed in Table 16 the items that they considered the most pressing issues and concerns.

## Table 11 Kahuku Medical Center Agendum fot Community Meeting #2 Wednesday, June 1, 2016 at 5 pm

- I. Introductions Stephany Nihipali Vaioleti, Administrator, Kahuku Medical Center, and Scott Daniels, Hawaii Office of Primary Care and Rural Health
- **II.** Review of Meeting #1 Scott Daniels
- **III.** Health Indicator/Health Outcome Data Scott Daniels
- **IV.** Health Survey Results Scott Daniels
- V. Develop Community Action Plan Gregg Kishaba & Scott Daniels
  - a. List community health issues
  - b. Prioritize community health issues
  - c. Discuss possible resolutions
  - d. Summarize community recommendations
  - e. Hospital response Stephany Vaioleti, CEO

#### VI. Next Steps

Community Health Needs Assessment Summary Report will be available (website)

Hospital Board Action Plan will be prepared, distributed, and made available to the public (website)

Table 12
Selected Health Behavioral Risk Factors
for the North Shore Community, Honolulu County, and State of Hawai'i, 2014

|   | North              | Honolulu | State of |
|---|--------------------|----------|----------|
|   | Shore <sup>1</sup> | County   | Hawai'i  |
| Health Status   |                    |          |          |
| Poor or fair health - Adults reporting poor or fair health  | 12.5               | 14.0     | 14.5     |
| Physical health not good - Adults with at least one physically unhealthy day in the past 30 days              | 33.8               | 30.2     | 30.9     |
| Average number of physically unhealthy days in the past 30 days   | 3.7                | 2.8      | 3.0      |
| Mental health not good - Adults with at least on mentally unhealty day in the past 30 days                    | 45.9               | 29.4     | 29.4     |
| Average number of mentally unhealthy days in the past 30 days   | 4.0                | 2.7      | 2.7      |
| Health Care Access  |                    |          |          |
| Adults without any kind of health care coverage   | 6.8                | 7.3      | 8.1      |
| Adults in the past 12 months unable to see a doctor because of the cost                                       | 9.1                | 7.2      | 8.7      |
| Seatbelt Use  |                    |          |          |
| Adults that report always using a seatbelt  | 91.7               | 93.3     | 92.9     |
| Physical Activity   |                    |          |          |
| Adults that did not participate in any physical acitivites/exercise in the past month, other than regular job | 14.8               | 20.3     | 19.6     |
| Alcohol Consumption   |                    |          |          |
| Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)                      | 16.1               | 18.9     | 19.7     |
| Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)                    | 7.0                | 6.5      | 7.9      |
| Tobacco Use   |                    |          |          |
| Adults that report smoking >100 cigarettes in their lifetime  | 37.5               | 37.6     | 40.1     |
| Adults currently smoking  | 18.8               | 13.2     | 14.1     |
| Body Weight   |                    |          |          |
| Adults that are overweight or obese (Body Mass Index ≥ 25)  | 56.2               | 58.4     | 58.1     |
| Adults that are obese (Body Mass Index ≥ 30)  | 22.1               | 22.2     | 22.1     |
| Fruits and Vegetables   |                    |          |          |
| Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day (2013)                          | 16.4               | 11.7     | 12.6     |
| Adults that eat vegetables 3 times or more per day (2013)   | 18.9               | 17.0     | 18.6     |

Source: Hawai'i State Department of Health, Behavioral Risk Factor Surveillance System (http://health.hawaii.gov/brfss [May 2016]).

<sup>&</sup>lt;sup>1</sup>The medical service area for Kahuku Medical Center most closely matches the Hawai'i State Department of Health's geographic definition of the North Shore community, which is comprised of the zip codes 96791, 96712, 96731, 96762, 96717, 96730.

Table 13
Selected Health Behavioral Risk Factors
for the North Shore Community, Honolulu County, and State of Hawai'i, 2014

|   | North | Honolulu | State of |
|---|-------|----------|----------|
|   | Shore | County   | Hawai'i  |
| Immuniztion: Flu and Pneumonia  |       |          |          |
| Adults that reported not receiving a flu shot or vaccine in the past 12 months                | 71.7  | 50.0     | 54.4     |
| Adults aged 65 years and older that reported not having had a pneumonia shot                  | *     | 33.7     | 35.4     |
| Medical Conditions (percent of adults diagnosed by a healthcare professional)                 |       |          |          |
| Asthma  | 18.8  | 16.0     | 16.2     |
| Chronic Obstructive Pulmonary Disease   | 2.4   | 3.2      | 3.8      |
| Kidney Disease  | 3.0   | 4.2      | 4.2      |
| Diabetes  | *     | 9.9      | 9.8      |
| Pre-diabetes or borderline diabetes   | *     | 6.4      | 6.3      |
| Myocardial infarction (heart attack)  | 0.6   | 2.7      | 3.1      |
| Angina (coronary heart disease)   | 0.1   | 3.3      | 3.4      |
| Stroke  | 3.6   | 3.2      | 3.1      |
| High blood pressure (2013)  | 19.2  | 28.6     | 28.5     |
| High cholesterol (2013)   | 23.1  | 34.4     | 34.9     |
| Disability (limited in any way because of health problems)                                    | 17.8  | 13.6     | 15.2     |
| Arthritis   | 21.4  | 19.9     | 20.7     |
| Medical Testing   |       |          |          |
| Women aged 40 years and older that reported never having a mammogram                          | *     | 5.5      | 6.5      |
| Adult women that reported never receiving a Pap smear   | *     | 18.0     | 16.3     |
| Adults aged 50 years and older that reported never having a blood stool test using a home kit | *     | 54.4     | 55.3     |
| Adults aged 50 years and older that reported never having a colonoscopy or sigmoidoscopy      | *     | 34.4     | 35.3     |

Source: Hawai'i State Department of Health, Behavioral Risk Factor Surveillance System (http://health.hawaii.gov/brfss [May 2016]).

<sup>\*</sup>Sample size was too small to provide an accurate measure.

Table 14
What do you think is the top health or health care challenge facing our community?

| our community?               |      |        |      |        |  |  |  |
|------------------------------|------|--------|------|--------|--|--|--|
|                              | Subt | otals  | Tota | ls     |  |  |  |
| Response Category            | No.  | %      | No.  | %      |  |  |  |
| Healthy lifestyles           |      |        | 50   | 27.3%  |  |  |  |
| Healthy food/diet            | 20   | 10.9%  |      |        |  |  |  |
| Exercise options             | 12   | 6.6%   |      |        |  |  |  |
| Healthy lifestyles           | 8    | 4.4%   |      |        |  |  |  |
| Drug abuse                   | 8    | 4.4%   |      |        |  |  |  |
| Other (one answer responses) | 2    | 1.1%   |      |        |  |  |  |
| Specific Health Conditions   |      |        | 38   | 20.8%  |  |  |  |
| Obesity                      | 27   | 14.8%  |      |        |  |  |  |
| Diabetes                     | 7    | 3.8%   |      |        |  |  |  |
| Hypertension                 | 2    | 1.1%   |      |        |  |  |  |
| Other (one answer responses) | 2    | 1.1%   |      |        |  |  |  |
| Specialty Care/Physicians    |      |        | 34   | 18.6%  |  |  |  |
| More services                | 12   | 6.6%   |      |        |  |  |  |
| More doctors                 | 10   | 5.5%   |      |        |  |  |  |
| Dialysis                     | 3    | 1.6%   |      |        |  |  |  |
| Women's health services      | 3    | 1.6%   |      |        |  |  |  |
| Elder care                   | 2    | 1.1%   |      |        |  |  |  |
| Other (one answer responses) | 4    | 2.2%   |      |        |  |  |  |
| Access to care               |      |        | 30   | 16.4%  |  |  |  |
| Cost of care                 | 17   | 9.3%   |      |        |  |  |  |
| Uninsured                    | 6    | 3.3%   |      |        |  |  |  |
| Access to care               | 5    | 2.7%   |      |        |  |  |  |
| Other (one answer responses) | 2    | 1.1%   |      |        |  |  |  |
| Community services           |      |        | 17   | 9.3%   |  |  |  |
| Health education             | 9    | 4.9%   |      |        |  |  |  |
| Education                    | 5    | 2.7%   |      |        |  |  |  |
| Other (one answer responses) | 3    | 1.6%   |      |        |  |  |  |
| Hospital                     |      |        | 9    | 4.9%   |  |  |  |
| Better equipment/technology  | 4    | 2.2%   |      |        |  |  |  |
| Trust                        | 3    | 1.6%   |      |        |  |  |  |
| Other (one answer responses) | 2    | 1.1%   |      |        |  |  |  |
| Other (one answer responses) | 5    | 2.7%   | 5    | 2.7%   |  |  |  |
| Total                        | 183  | 100.0% | 183  | 100.0% |  |  |  |

Some respondents answered more than once. Non-responses not included.

Table 15
What changes in health care services would you like to see in our community, if any?

| any?                                      |     |        |     |        |
|---|-----|--------|-----|--------|
| Response Category                         | No. | %      | No. | %      |
| Specialty Care                            |     |        | 93  | 51.4%  |
| More specialty services                   | 23  | 12.7%  |     |        |
| Dialysis                                  | 15  | 8.3%   |     |        |
| More specialty doctors                    | 12  | 6.6%   |     |        |
| Dental                                    | 9   | 5.0%   |     |        |
| Women's Health/OB/GYN                     | 8   | 4.4%   |     |        |
| Mental health                             | 7   | 3.9%   |     |        |
| Alternative medicine/healing              | 6   | 3.3%   |     |        |
| Birthing center                           | 5   | 2.8%   |     |        |
| Elder care                                | 3   | 1.7%   |     |        |
| Surgery                                   | 2   | 1.1%   |     |        |
| Urgent care                               | 2   | 1.1%   |     |        |
| Cancer                                    | 1   | 0.6%   |     |        |
| Community Services                        |     |        | 45  | 24.9%  |
| Rec center/Gym/Workout areas/Better parks | 17  | 9.4%   |     |        |
| Healthy food/diet                         | 10  | 5.5%   |     |        |
| Preventive care                           | 10  | 5.5%   |     |        |
| Drug abuse services                       | 3   | 1.7%   |     |        |
| Homeless services                         | 2   | 1.1%   |     |        |
| WIC clinic, parenting classes             | 2   | 1.1%   |     |        |
| Home visits                               | 1   | 0.6%   |     |        |
| Education                                 |     |        | 17  | 9.4%   |
| Health education                          | 13  | 7.2%   |     |        |
| Health screening                          | 2   | 1.1%   |     |        |
| Other (one answer responses)              | 2   | 1.1%   |     |        |
| Hospital                                  |     |        | 15  | 8.3%   |
| Better technology                         | 9   | 5.0%   |     |        |
| More community interaction/transparancy   | 2   | 1.1%   |     |        |
| Other (one answer responses)              | 4   | 2.2%   |     |        |
| Access                                    |     |        | 6   | 3.3%   |
| Lower costs                               | 5   | 2.8%   |     |        |
| Tricare acceptance                        | 1   | 0.6%   |     |        |
| Other (one answer responses)              | 4   | 2.2%   | 4   | 2.2%   |
| None                                      | 1   | 0.6%   | 1   | 0.6%   |
| Total                                     | 181 | 100.0% | 181 | 100.0% |

Some respondents answered more than once. Non-respondents not included.

#### Table 16

#### Kahuku Medical Center Community Health Needs Assessment— Community Health Issues Identified by Advisory Committee at Meeting #2

- I. Continue to work on attracting specialists to practice in the community.
  - a. Use telehealth where possible.
  - b. Expand spaces where possible.
  - c. Collaborate with other providers to enhance services provided.
- II. Improve communications and outreach of Kahuku Medical Center and of the services they offer.
  - a. Improve social media presence.
  - b. Re-examine existing communications efforts and adapt as necessary.
  - c. Presence at community events.
- III. Promote healthy lifestyles
  - a. Develop fitness/wellness opportunities on campus.
  - b. Host events and classes that bring people to Kahuku Medical Center and promote health.

#### Past Community Health Need Recommendations and Status

In the previous CHNA, Kahuku Medical Center and the community identified the following priorities:

#### **Community outreach programs**

Kahuku Medical Center has reached out to Brigham Young University-Hawaii, Kahuku High School, Turtle Bay Resort, and Oceanside Marriott to explore opportunities to provide services on-site as well as serve as a health care resource.

#### **Investigate telehealth programs**

This has proved to be more difficult than originally anticipated due to difficulties around telehealth regulation and reimbursement. Hawaii just recently passed legislation that should make implementing telehealth easier and Kahuku Medical Center will continue to pursue it as a possibility for providing specialty services for our community.

#### Develop program for provider recruitment and retention

Kahuku Medical Center has aggressively added to its staff of physicians and and expanded its services. Kahuku Medical Center now has a podiatrist, a pulmonologist, behavioral health, ultrasound services, and offers gastroenterology on site monthly. Kahuku Medical Center is also in the process of hiring two additional full time family physicians and will be able to treat patient from pre-natal to 100+.

#### **Community Health Need Recommendations**

Due to limited resources, the Kahuku Medical Center and Kahuku community cannot address all issues identified in Table 14. The community advisory committee members were asked to identify and list their top priorities and discuss potential implementation strategies. The priorities identified and possible implementation strategies are:

#### **Develop health services identified by the community**

- 1. Hospital will continue to recruit specialists, where feasible, on a part-time basis.
- 2. Hospital will continue to research how to best incorporate telehealth into its operations.
- 3. Will conduct health fairs and be present at community events.

#### Develop programs to promote healthy living

- 1. Explore opportunities to make Kahuku Medical Center campus a destination for health education and healthy activities.
- 2. Outreach to other community organizations to provide information on living healthy.

### Improve community understanding of Kahuku Medical Center's services and role in the community as a health promoter.

- 1. Expand social media presence to provide further outreach to community of existing services.
- 2. Continue to have presence at community events and functions.
- 3. Ensure current communication efforts are adequate for informing the community (internal and external)